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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,105

02/10/2005

Shingo Boda

2927-0185PUS1

4255

2292

7590

06/01/2006

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EXAMINER

SAINT SURIN, JACQUES M

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/524,105

Applicant(s)

BODA ET AL.

Examiner

Jacques M. Saint-Surin

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 4 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/10/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. Figure 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1 and 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Brenner et al. (WO 00/29270).

Regarding claims 1, Brenner shows in Fig. 1 a transmitter 30, vibration sensor 17, object to be measured (10), network interface 14 and digital network 23. Note that the A/D converter is inherent since the processor 11 would require a digital signal before being processed the obtained signals.

Regarding claim 3, it is similar in scope with claim 1 and therefore, it is rejected for the reasons set forth for that claim. Brenner furthermore shows speaker 21 for generating an audio signal or a warning signal.

Regarding claim 4, Brenner shows in Fig. 1 a plurality of transmitters 30 connected to a plurality of vibration sensors 17.

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Toomey (US 2003/00114199).

Regarding claim 1, Toomey discloses a vibration information transmission apparatus (system 10) comprising a transmitter (vibration generator 34) provided as an apparatus for outputting vibration information transmitted thereto from a vibration sensor (vibration sensor 12) for detecting vibration of an object (structure 14) to be measured to a digital network (network 48), said transmitter having in the same casing a transducer (sound generator 346) circuit for converting said vibration information transmitted thereto from said vibration sensor (12) into an analog electric signal; an A/D conversion circuit (A/D converter, see: col. 0069, lines 9-11) for converting said analog electric signal transmitted thereto from said transducer circuit into a digital signal, and a network interface (390) for outputting said digital signal transmitted thereto from said A/D conversion circuit to said digital network (48).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brenner or Toomey (US 2003/00114199) in view of Applicant's admitted prior art.

Regarding claim 2, although Brenner or Toomey discloses a vibration detection and an A/D converter, it does not specifically disclose or suggest a vibration detection circuit in parallel with said A/D conversion circuit for detecting an abnormal vibration by reading an amplitude value of said analog electric signal transmitted thereto. Applicant acknowledges that this limitation is conventional on page 14, lines 6-13 of the specification. It would have been obvious to one having ordinary skill in the art at the time of the invention to be motivated to recognize by placing the A/D converter in

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parallel with the vibration detection, abnormal vibration would be detected by reading the amplitude value in a conventional manner.

8. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toomey (US 2003/00114199) in view of Applicant's admitted prior art.

Regarding claim 3-4, Toomey does not disclose or suggest giving a warning when there is an abnormal vibration and a plurality of transmitters is connected to a plurality of vibration sensors individually at 1:1. Applicant's admitted prior art discloses in page 1, lines 22-23 a vibration monitor 4 for monitoring abnormal vibrations and giving a warning. Applicant's admitted prior art further shows in Fig. 6 a plurality of transmitters (transducers 3-1, 3-2, 3-n is connected to a plurality vibration sensors 2-1, 2-2, 2-n). It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize in Toomey the techniques of Applicant's admitted prior art because generating a warning signal upon an abnormal vibration or a fault and the arrangement of the transmitters and the sensors were well known by Applicant's admitted prior art before the invention was made and therefore one of the ordinary skill in the art would be motivated to recognize the advantages and desirability to modify Toomey and provide a combination that would be more effective and efficient.

***Allowable Subject Matter***

8. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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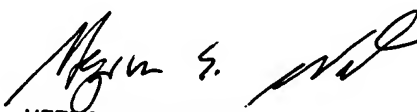
**Conclusion**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M. Saint-Surin whose telephone number is (571) 272-2206. The examiner can normally be reached on Mondays to Fridays between 10:30 A.M and 800 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jacques M. Saint-Surin  
May 26, 2006

  
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